AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

At page 1, immediately after the title, please add the following heading:

BACKGROUND OF THE INVENTION

At page 1, beginning at line 5, please amend the sub-heading as follows:

~~Description:~~ **Field of the Invention**

At page 1, beginning at line 13, please insert the following sub-heading:

Description of Related Technology

At page 3, immediately after the paragraph beginning at line 14, please insert the following heading:

GENERAL DESCRIPTION OF THE INVENTION

At page 3, please delete the paragraph beginning at line 29 as follows:

~~According to the invention, this objective is achieved by a method according to Claim 1.~~

At page 17, please delete the paragraph beginning at line 16 as follows:

~~The drawings show the following:~~

At page 17, immediately before the paragraph beginning at line 18, please insert the following heading:

BRIEF DESCRIPTION OF THE DRAWINGS

At page 17, please amend the paragraphs beginning at line 18 as follows:

Figure 1 is a schematic diagram of system components of a payment assurance system;

Figure 2 is a schematic diagram of ~~an especially preferred~~ another embodiment of a payment assurance system, a hand-held scanner and a payment assurance PC;

Figure 3 is a schematic diagram of the generation and checking of postage indicia and

Figure 4 is yet another ~~especially preferred~~ embodiment of the checking method with an especially preferred sequence of partial checks.

At page 17, immediately before the paragraph beginning at line 30, please insert the following heading:

DETAILED DESCRIPTION OF THE INVENTION

At page 18, please amend the paragraph beginning at line 30 as follows:

A checking system 10 that is suitable for this purpose preferably contains the components shown in Figure 1.

At page 19, please amend the paragraphs beginning at line 1 as follows:

Scanner 20

The scanners 20 serve to read in the digital postage indicium of the digital franking. These postage indicia are preferably 2D-codes in the format of a data matrix, with the utilized error correction ECC200. Depending on the type of scanner, the data is transmitted wirelessly or by cable, whereby the wireless scanner has a multi-line display and thus an output possibility as well as a touch screen or a keyboard for rudimentary input.

Scanner Controller 22/ Validation controller 24

The interfaces between the scanners 20 and the remaining systems of the preferred payment assurance digital franking system 10 are made up of the scanner controller 22 and the validation controller 24 as components. The scanner controller 22 administers a queue of matrix codes, said queue coming from the hand-held scanner 20 and being available to be checked, and the scanner controller 22 essentially maintains contact with the scanners 20 and is in contact with the rest of the system 10 only via the validation ~~scanner~~ controller 24.

The scanner controller 22 and the validation controller 24 serve as an interface between the scanners 20 and the other systems for checking the 2D-barcodes. The 2D-barcode content, which has come from the optical detection and which has been converted and error-corrected, is transmitted to the scanners 20 and the other systems; these then initiate the checking and, in the case of the wireless scanner, they provide an output of the reading and checking result, and they serve as an interface between manual reprocessing and checking by the examiner that might be necessary and the other systems.

Crypto-system 26

The crypto-system 26 carries out the content-related 28 and cryptographic checking 30 of the 2D-barcode content as well as the protected storage of safety-relevant data and algorithms.

Postage value loading station (value transfer center) 32

The postage value loading station (value transfer center) 32 is the central system within the digital franking set-up. It serves as the interface to the customer systems. The customers can withdraw specified amounts from this station for use in subsequent franking. The keys for securing the method are generated at the postage value loading station (value transfer ~~system~~ center 32). Moreover, it serves as the interface to the invoicing systems. The

following interfaces are provided for the preferred payment assurance system for purposes of digital franking:

At page 20, please amend the paragraphs beginning at line 16 as follows:

Preferred central payment assurance 34

The mailing-related information is collected in the preferred central payment assurance system 34 and made available to other systems. This is where the production reports are created which, in turn, lead to the creation of negative files. Moreover, the central payment assurance system 34 receives the current key data from the postage value loading station 32 and then forwards it to the individual crypto-servers.

Data suppliers 36

At page 21, please amend the paragraph beginning at line 1 as follows:

Payment assurance application 38

At page 21, please amend the paragraphs beginning at line 10 as follows:

Automatic detection of the 2D-barcodes 40

The automatic detection of the 2D-barcodes 40 is carried out within the SSA. For this purpose, the image information is forwarded to the sender franking 2D-code reader 42. There, the image is converted into the content of the data matrix code. Subsequently, the 2D-barcode content is transmitted to the crypto-system for checking; the returned checking result is evaluated and transmitted to the optical detection system (IMM) 44 for purposes of encoding the mailpiece. Preferred components of such an expanded checking method are shown in Figure 2.

Sender franking 2D-code reader 42

For each reading machine (ALM/ILVM), there is a sender franking 2D-code reader that receives the image data of the mailpieces via an optical detection system (IMM) 44 and further processes this data for purposes of payment assurance. Within the scope of preferred payment assurance digital franking, this means that, if a 2D-code is recognized, the 2D-data matrix code is extracted from the image data and, using the error-correction procedure ECC200, it is converted into a byte string that constitutes the content of the 2D-barcode.

This byte string is transmitted to the validation controller 24 to be checked. The checking result is then forwarded via the interface of the optical detection system 44 and used there for encoding purposes.

Crypto-system 26 for sender franking 2D-code readers 42

At page 22, please amend the paragraphs beginning at line 9 as follows:

Depending on the properties of the crypto-cards, approximately 27 checking procedures per second can be assumed. Since the rate of the reading machines is about 10 mailpieces per second, it does not seem to be practical to combine each of the sender franking 2D-code readers 42 with a crypto-system 26. In addition, it cannot be assumed that 100% of the PC-franked mailpieces are produced simultaneously on all of the machines. Thus, it seems practical to separate the crypto-systems 26 and to operate several PC-franking readers with one crypto-system 26. The approach selected here should be such that it can be scaled, that is to say, that several crypto-systems 26 are possible per mail center. This is relevant, for example, for mail centers with a high mail volume and with a large number of reading machines, where a second crypto-system 26 can be provided right from the start. Moreover, during the actual operations later on, the number of servers can be increased as the need arises.

In order to reduce the complexity, the architecture should preferably be selected in such a way that the individual reading machines are associated with a crypto-system 26 in a fixed manner and conceivably still supplemented with an additional fallback configuration that, in case of an error, attempts to switch over to another crypto-system 26.

The separation of the crypto-system 26 and the sender franking 2D-code reader 42 also entails the advantage that the machine reading as well as the checking with the hand-held scanner 20 can be carried out with the same crypto-system 26, as a result of which the same function does not have to be implemented twice, which additionally entails essential advantages in the implementation of the invention.

At page 25, please amend the paragraphs beginning at line 27 as follows:

Figure 4 shows an overview of the sequence of the checking procedure within the validation controller 24 in case it was triggered by a reading system.

In order to illustrate the sequence, the figure also shows the optical detection system (IMM system) 44 as well as the sender franking 2D-code reader 42 so as to present the overall context of the checking procedure. However, the role of the crypto-system 26 is limited to checking the functions between the 2D-barcode and the return as well as to logging the result.

In case of the telegram manager interface, several service tasks would be started on the validation controller 24 that are waiting for checking request telegrams and that would call the checking routine with the telegram content. The result of the checking routine is awaited and packed into a telegram and sent back to the requesting client.

Figure 4 shows another preferred embodiment of the control of a sequence of partial checking procedures by the checking unit (validation controller) 24. In this additional preferred embodiment, the postage indicia are detected by an automatic optical recognition

system (Prima/IMM) 44. The data is transmitted from the optical checking unit 44 to a reading and detection unit (sender franking 2D-code reader) 42.

At page 28, please amend the paragraph beginning at line 4 as follows:

For checking purposes, the number of days between the current checking date at the time of the processing and the date contained in the 2D-barcode is formed, for example, August 2 to August 1 = 1 day. If the number of days ascertained is larger than the value prescribed for the product, then the payment assurance code associated with the warning case "PC-franking date" is returned to the validation controller 24, and otherwise, a code is returned that documents the fact that the checking procedure was successful. If in a simplified method, a comparison is always made with the value for standard mailings, then after the checking result has been output, the possibility should exist to correct this checking result via a key on the scanner if the current product allows a longer processing time.

At page 30, please amend the paragraph beginning at line 13 as follows:

The identification number of a customer franking means identifies an individual specification that a customer calls from the system (value transfer center 32). These specifications are stored in a so-called safe box on the customer's system. These are hardware components in the form of a SmartCard including a reading system, or a dongle. The specification values are securely stored in the safe box from which the customer can call individual franking amounts without being connected online to the postage value loading station (value transfer center 32).

At page 32, please amend the paragraph beginning at line 9 as follows:

The sequence is such that the validation controller 24, after the conclusion of the automated checking procedures, initiates the output of the data of the 2D-barcode on the wireless scanner, or on the payment assurance PC. For this purpose, a callback method is available that is associated at the beginning of a session.

At page 33, please amend the paragraphs beginning at line 17 as follows:

As the input parameter, this function receives the split 2D-barcode object of the scanner result. On the basis of the franking date and the key number, the symmetrical key that is valid for this point in time is looked up and the crypto-string of the transferred object is decrypted using this key according to the Triple DES CBC method. Within the framework of the interface to the payment assurance system 34, a decision is made about the value that is to be ascribed to the initialization vector, and whether the process is to be carried out with inner-bound or outer-bound CBC and with which block length this is being done.

If the key contained in the 2D-barcode is not present in the crypto-system 26, then the payment assurance warning "suspicion of fraud (key)" is returned with the error message that the key with the key number was not found.

At page 35, please amend the paragraphs beginning at line 6 as follows:

Via a callback method, the validation controller 24 has the possibility to actuate a result output on the output device involved in the current checking procedure. For this purpose, it returns the 2D-barcode object and the determined payment assurance warning code to this callback method. The code of the reprocessing method selected by the checking unit can be supplied as the return value.

Likewise at the beginning of the session, the callback method for the output is assigned at the time of the log-on to the validation controller 24.